

Exemption No. 6011

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98055-4056**

In the matter of the petition of

Ilyushin Aviation Complex

Regulatory Docket No. 27849

for an exemption from §§ 25.571 and 25.631 of
the Federal Aviation Regulations

PARTIAL GRANT OF EXEMPTION

By letter dated February 18, 1994, Ilyushin Aviation Complex, Krjijanovsky St., Moscow, Russia, petitioned for exemptions from two airframe birdstrike requirements: the required birdstrike speed specified in § 25.571, Amendment 25-72, and the required weight of the bird specified in § 25.631.

Sections of the FAR affected:

Section 25.571(e)(1), as amended by Amendment 25-72, requires residual strength capability after impact with a 4-pound bird at a speed V_c from sea level to 8,000 feet. The amendment introduced an error in the rule, which should have required the greater speed of V_c at sea level or $0.85 V_c$ at 8,000 feet.

Section 25.631 requires that the airplane must be capable of continued safe flight and landing after impact with an 8-pound bird on the empennage at a speed V_c at sea level.

ANM-94-026-E

The petitioner's supportive information is as follows:

In accordance with procedures described in an FAA policy letter dated December 9, 1992, Ilyushin requests an exemption from the bird impact speed of § 25.571(e)(1), as amended by Amendment 25-72. Instead of compliance with the rule as stated, Ilyushin requests to use a bird impact speed which is the greater of V_c at sea level or $0.85 V_c$ at 8,000 feet, which the above FAA letter states as acceptable.

Regarding the request for exemption from the 8-pound bird weight required by § 25.631, Ilyushin states that there is an inconsistency with §§ 25.775 and 25.571, and that data do not show there is a need to consider impact by birds heavier than 4-pounds.

A summary of the February 18, 1994, Ilyushin Aviation Complex petition for exemption was published in the Federal Register on September 23, 1994, (59 FR 48930). There were no comments.

The FAA's analysis/summary is as follows:

Since the FAA has previously acknowledged there is an error in § 25.571(e)(1) as amended by Amendment 25-72, and since the petitioner's request on that matter meets the intent of the rule, the FAA finds no reason to deny that request.

Regarding the petitioner's request for exemption from the 8-pound bird impact required by § 25.631, the FAA does acknowledge there is an apparent inconsistency in the bird strike requirements. There are worldwide data which show that birds heavier than 4-pounds are frequently struck by airplanes. The FAA had reviewed such data when § 25.631 was adopted, and more recently as part of an ARAC harmonization effort. Section 25.631 was initiated by the loss of an airplane caused by impact with a bird estimated by weight from 12 to 17 pounds. It is unclear why the FAA proposed and adopted the inconsistent requirements of § 25.571(e)(1) as amended by Amendment 25-45. A review of the rules docket did not reveal any rationale, and furthermore, two comments to the proposed rule stating the rules were inconsistent were not addressed in any detail. Nevertheless, the reasons for adoption of the 8-pound empennage requirement are still valid, and the FAA therefore does not accept the rationale provided by the petitioner to support an exemption.

In consideration of the foregoing, I find that: (a) The petitioner's request for exemption from the 8-pound bird weight required by § 25.631 is not in the public interest and that request is therefore denied, and (b) The petitioner's request for exemption from the speed requirements of § 25.571(e)(1) as amended by Amendment 25-72, is in the public interest and meets the intent of the regulations.

Therefore, pursuant to the authority contained in §§ 313(a) and 601(c) of the Federal Aviation Act of 1958, delegated to me by the Administrator (14 CFR 11.53), the petition of Ilyushin Aviation Complex for exemption from the bird weight requirements of § 25.631 of the FAR is denied, and the petition for exemption from the bird speed requirements of § 25.571(e)(1) is granted.

Issued in Renton, Washington, on December 30, 1994.

Stewart R. Miller, Acting Manager
Transport Airplane Directorate
Aircraft Certification Service